

# **DEATH STATISTICS**



## CRUDE DEATH RATE

In 1997, the crude death rate for Lancaster County was 6.7 per 1000 population. The average crude death rate between 1981 and 1997 was 6.9 per 1000 population.

The crude death rate for the State of Nebraska during 1997 was 9.4 per 1000 population. Figure 14 illustrates the death rates for Lancaster County and the State of Nebraska.

## TOTAL NUMBER OF DEATHS

There were 1563 deaths among Lancaster County residents during 1997. Of these, 1438 (92.0%) were residents of Lincoln. The remaining 125

(8.0%) resided outside the City of Lincoln. The most frequent month for death was December followed by January (Table 14).

### Race

Of the deaths in 1997, 1504 (96.2%) were among Whites, 35 (2.2%) were among Blacks, 22 (1.4%) were among persons of other races, and 2 (0.1%) were not classifiable.

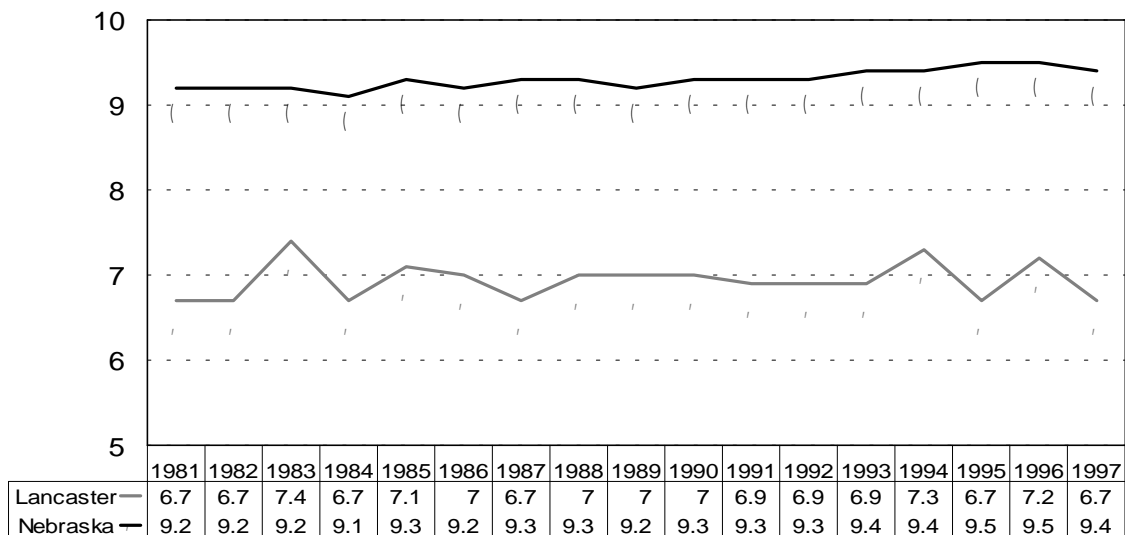
### Sex

During 1997, 46.4% of all deaths in Lancaster County were males and 53.6% were females.

### Age

In 1997, 18 infants (less than 1 year of age) died, accounting for 1.2% of all deaths and an infant

**Figure 14: Comparison of Death Rates**  
Lancaster County and Nebraska  
1981 to 1997



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mortality rate of 5.6 per 1000 live births (*See page 30 for further discussion of infant mortality*). A total of 24 children 0 to 14 died in 1997, accounting for 1.5% of all deaths. The most frequent age group among deaths was 80 to 89 years (28.8% of all deaths) followed by 70 to 79 years (24.2% of all deaths). (Table 16).

The mean age at death has increased 1.6 years during the past decade (1987-1997). In 1997, the mean age of death for males and females was 69.2 and 77.1 years, respectively (Figure 15). Males indicated an increase of 1.3 years over the past decade, while females indicated an increase of 1.7 years.

Using a five year rolling average (1993 to 1997), the mean age of death for White individuals (73.5 years) was approximately 17.8 years older than the mean age of death for individuals in other racial/ethnic categories (55.7 years).

**TABLE 14.**  
**Deaths by Month,**  
**Lancaster County 1997**

<u>Month</u>	<u>Number</u>	<u>Percent</u>
January	148	9.5
February	134	8.6
March	129	8.3
April	129	8.3
May	128	8.2
June	105	6.7
July	130	8.3
August	121	7.7
September	108	6.9
October	144	9.2
November	132	8.4
December	155	9.9
<b>TOTAL</b>	<b>1563</b>	<b>100.0</b>

## LEADING CAUSES OF DEATH

In 1997, 32.8% of all deaths were due to heart disease and 22.7% were due to cancer. These two major causes of death accounted for 55.5% of all deaths (Figure 16). Table 17 details statistics on the leading causes of death in Lancaster County.

Table 15 lists the average age of death by sex by selected cause. The six leading causes of death for males and females in Lancaster County and Nebraska can be found in Table 18.

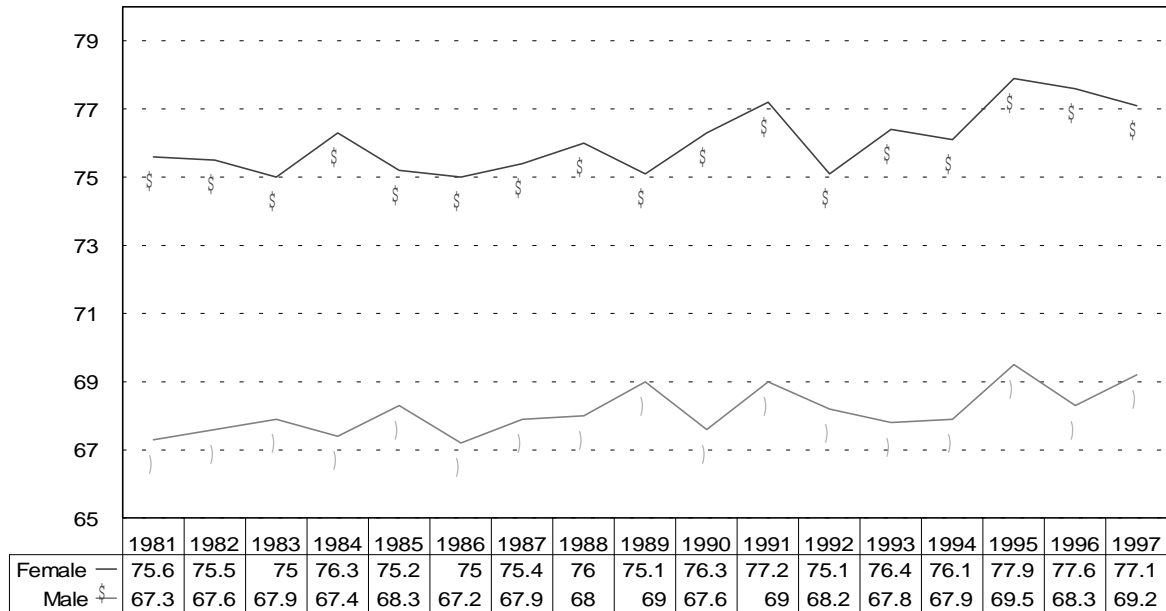
### Age and Sex

Among males 1 to 29 years of age, unintentional injury and suicide were the leading causes of death (Table 19). Heart disease and unintentional injury, respectively, were the leading causes of death among females 1-29 years of age. Cancer was the leading cause of death for males and females 30 to 59 years old. The leading cause of death for males and females 60 and older was heart disease. Causes of infant mortality are listed in Table 23.

**TABLE 15.**  
**Average Age of Death by Sex Among**  
**the Seven Leading Cause of Death**  
**Lancaster County, 1997**

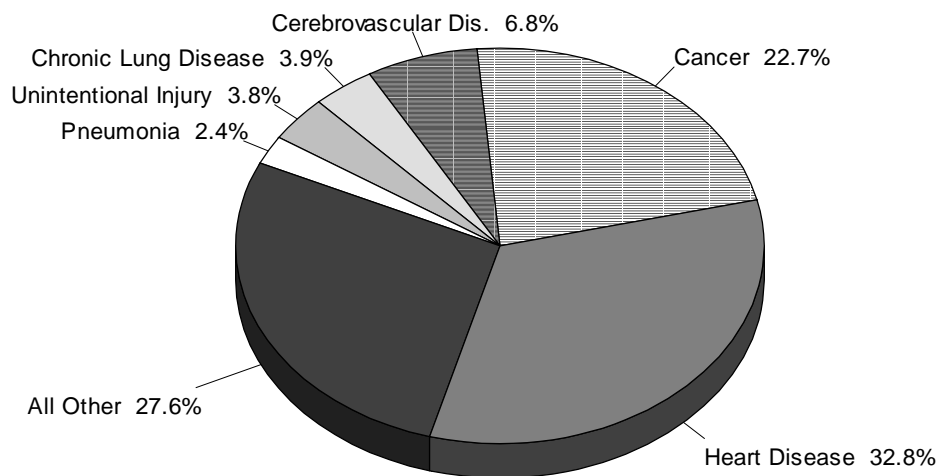
<u>Cause of Death</u>	<u>Male</u>	<u>Female</u>
Heart Disease	74.4	82.1
Cancer	68.8	71.8
Cerebrovascular Disease	76.6	83.8
Chronic Lung Disease	79.2	76.5
Unintentional Injury	53.5	70.4
Pneumonia	79.5	77.7
Suicide	48.9	46.0

**Figure 15: Mean Age of Death for Males and Females**  
Lancaster County, NE  
1981-1997



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**Figure 16: Leading Causes of Death**  
Lancaster County, NE  
1997



Lincoln-Lancaster County Health Department

**TABLE 16.**  
**Deaths by Age and Sex**  
**Lancaster County, 1997**

<b><u>Age</u></b>	<b><u>Total Deaths</u></b>	<b><u>% of Total Deaths</u></b>	<b><u>Male Deaths</u></b>	<b><u>% of Male Deaths</u></b>	<b><u>Female Deaths</u></b>	<b><u>% of Female Deaths</u></b>
<1	18	1.2	13	1.8	5	0.6
1 - 4	3	0.2	2	0.3	1	0.1
5 - 9	0	0.0	0	0.0	0	0.0
10 - 14	3	0.2	1	0.1	2	0.2
15 - 19	4	0.3	3	0.4	1	0.1
20 - 24	12	0.8	8	1.1	4	0.5
25 - 29	12	0.8	7	1.0	5	0.6
30 - 39	50	3.2	27	3.7	23	2.7
40 - 49	76	4.9	45	6.2	31	3.7
50 - 59	113	7.2	62	8.5	51	6.1
60 - 69	180	11.5	112	15.4	68	8.1
70 - 79	378	24.2	204	28.1	174	20.8
80 - 89	450	28.8	180	24.8	270	32.3
90 - 99	255	16.3	62	8.5	193	23.1
>100	9	0.6	0	0.0	9	1.1
<b>TOTAL</b>	<b>1563</b>	<b>100.0</b>	<b>726</b>	<b>100.0</b>	<b>837</b>	<b>100.0</b>

**Mean Age of Death for Males 69.2 Years**  
**Mean Age of Death for Females 77.1 Years**

**TABLE 17.**  
**Causes of Death**  
**and Crude Rate per 100,000 Population**  
**Lancaster County, 1997**

<b><u>Cause of Death</u></b>	<b><u>Number of Deaths</u></b>	<b><u>% of Deaths</u></b>	<b><u>Crude Rate</u></b>
Heart Disease	513	32.8	219.9
Cancer	355	22.7	152.2
Cerebrovascular Disease	106	6.8	45.4
Chronic Lung Disease	61	3.9	26.1
Unintentional Injury	59	3.8	25.3
Pneumonia	38	2.4	16.3
Suicide	29	1.9	12.4
Mental Disorders	27	1.7	11.6
Diabetes Mellitus	25	1.6	10.7
Atherosclerosis	23	1.5	9.9
Alzheimer's Disease	19	1.2	8.1
Emphysema	14	0.9	6.0
Nephritis and Nephrosis	14	0.9	6.0
Septicemia	14	0.9	6.0
Parkinson's Disease	13	0.8	5.6
Aortic Aneurysm	11	0.7	4.7
Birth Defects	10	0.6	4.3
Cirrhosis of Liver	9	0.6	3.9
Diarrhea and Enteritis	8	0.5	3.4
Homicide	8	0.5	3.4
Asthma	7	0.4	3.0
AIDS	5	0.3	2.1
All Other Causes	<u>195</u>	<u>12.5</u>	<u>83.6</u>
<b>TOTAL</b>	<b>1563</b>	<b>100.0</b>	<b>669.8</b>

*Population for Lancaster County = 233,319 (estimated)*

**TABLE 18.**  
**Comparison of the Six Leading Causes of Death**  
**Lancaster County vs. the State of Nebraska, 1997**

<b>LANCASTERCOUNTY</b>		<b>STATEofNEBRASKA</b>	
<b><u>Cause of Death</u></b>	<b><u>Percent</u></b>	<b><u>Cause of Death</u></b>	<b><u>Percent</u></b>
Heart Disease	32.8%	Heart Disease	32.3%
Cancer	22.7%	Cancer	21.2%
Cerebrovascular Disease	6.8%	Cerebrovascular Disease	7.2%
Chronic Lung Disease	3.9%	Unintentional Injury	4.3%
Unintentional Injury	3.8%	Chronic Lung Disease	3.9%
Pneumonia	2.4%	Pneumonia	3.6%

### **Cancer Sites**

Cancers of the lung, trachea and bronchus were the leading causes of cancer-related death among males and females (Table 20). Lymphoid and prostate cancer were the next leading causes of cancer death in men. Breast, colon, and lymphoid cancers were the next leading causes of cancer death among women (Table 20). Cancer death rates are discussed on pages 33-34.

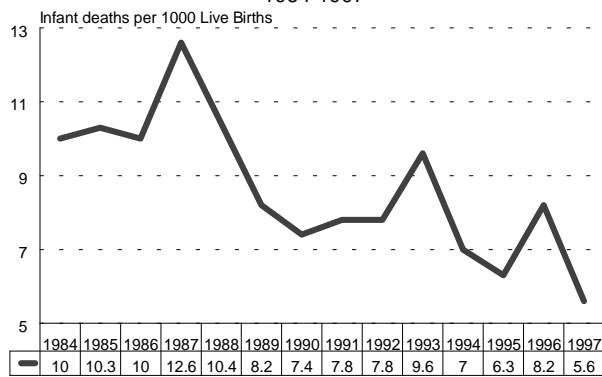
### **Suicide**

Suicides by age and method of suicide are shown in Table 21. The average age for male suicides was 48.9 years, compared to 46.0 years for females. About one-half of suicide deaths (51.7%) were among individuals 44 years of age or younger. In 1997, the crude rate for suicide was 12.4 per 100,000. This is an increase from the 1996 rate of 9.9 per 100,000, although there is considerable instability in these rates from year to year. The Lancaster County Health Objective for the Year 2000 is to reduce suicide mortality to an age-adjusted rate of 7.5 per 100,000 population.

## **INFANT MORTALITY RATE**

In 1997, 18 infant deaths occurred in Lancaster County for an infant mortality rate of 5.6 per 1000 live births (Figure 17). This represents a 2.6 per 1000 decrease from the 1996 infant mortality rate of 8.2 per 1,000 live births. The Lancaster County Health Objective for the Year 2000 is 7.0 per 1000 live births. In 1997, 72.2% of infant deaths were male and 27.8% were female.

**Figure 17: Infant Mortality Rate**  
 Lancaster County, NE  
 1984-1997



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**TABLE 19.**  
**Three Leading Causes of Death by**  
**Age Group and Sex**  
**Lancaster County, 1997**

<u>RANK</u>	<u>SEX</u>	<u>1 - 29</u>	<u>30 - 59</u>	<u>60 &amp; Over</u>	<u>All Ages</u>
<b>1</b>	<b>M</b>	<b>Unintentional Injury*</b> <b>Suicide*</b>	<b>Cancer</b>	<b>Heart Disease</b>	<b>Heart Disease</b>
	<b>F</b>	<b>Heart Disease</b>	<b>Cancer</b>	<b>Heart Disease</b>	<b>Heart Disease</b>
<b>2</b>	<b>M</b>	<b>AIDS*</b> <b>Cystic Fibrosis*</b> <b>Homicide*</b>	<b>Heart Disease</b>	<b>Cancer</b>	<b>Cancer</b>
	<b>F</b>	<b>Unintentional Injury</b>	<b>Heart Disease</b>	<b>Cancer</b>	<b>Cancer</b>
<b>3</b>	<b>M</b>	<b>**</b>	<b>Unintentional Injury</b>	<b>Cerebrovascular Dis.*</b> <b>Chronic Lung Dis.*</b>	<b>Cerebrovascular Disease</b>
	<b>F</b>	<b>**</b>	<b>Suicide</b>	<b>Cerebrovascular Disease</b>	<b>Cerebrovascular Disease</b>

**\* Tie**

**\*\* Too few for subgroup analysis**

**TABLE 20.**  
**Cancer by Type by Sex**  
**Lancaster County, 1997**

<u>Site of Cancer</u>	<u>Cases in Males</u>	<u>Cases in Females</u>	<u>Total</u>
Lung, Trachea, Bronchus	53	37	90
Lymphoid and Histiocytic	25	20	45
Colon/Rectum	15	21	36
Female Breast	0	34	34
Prostate	22	0	22
Pancreas	6	9	15
Ovary/other uterine adnexa	0	12	12
Kidney/other urinary organs	4	6	10
Bladder	6	3	9
Skin	4	4	8
Liver	5	2	7
Brain	6	1	7
Esophagus	5	1	6
Gallbladder and Extrahepatic Bile Ducts	2	3	5
Stomach	4	1	5
All Other Sites	13	31	44
<b>TOTAL</b>	<b>170</b>	<b>185</b>	<b>355</b>

**TABLE 21.**  
**Suicides by Type by Age Group**  
**Lancaster County, 1997**

<b>Type of Suicide</b>	<b>1-14</b>	<b>15-29</b>	<b>30-44</b>	<b>45-59</b>	<b>60 &amp; Over</b>	<b>Total</b>
Firearms and Explosives	0	4	4	2	6	16
Poisoning by Solids or Liquids	0	0	2	4	0	6
Hanging and Suffocation	0	1	2	0	1	4
Poisoning by Other Gases and Vapors	0	0	1	0	1	2
Other And Unspecified Means	0	0	1	0	0	1
<b>TOTAL</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>6</b>	<b>8</b>	<b>29</b>

A majority (72.2%) of all infant deaths in 1997 were White (Table 22), a rate of 4.5 per 1000 White births. Five infant deaths among other races in 1997 translated into an infant mortality rate of 14.3 per 1000 non-White births.

The leading cause of infant mortality was respiratory conditions (Table 23).

## FETAL DEATHS

Eighteen fetal deaths were reported in 1997, representing a fetal death rate of 5.6 per

1000 live births (Figure 18). This is a decrease from the 1996 fetal death rate of 6.1 per 1,000 live births, but is comparable to recent fetal death rates.

## CRUDE AND AGE-ADJUSTED RATES FOR THE THREE LEADING CAUSES OF DEATH

### Heart Disease

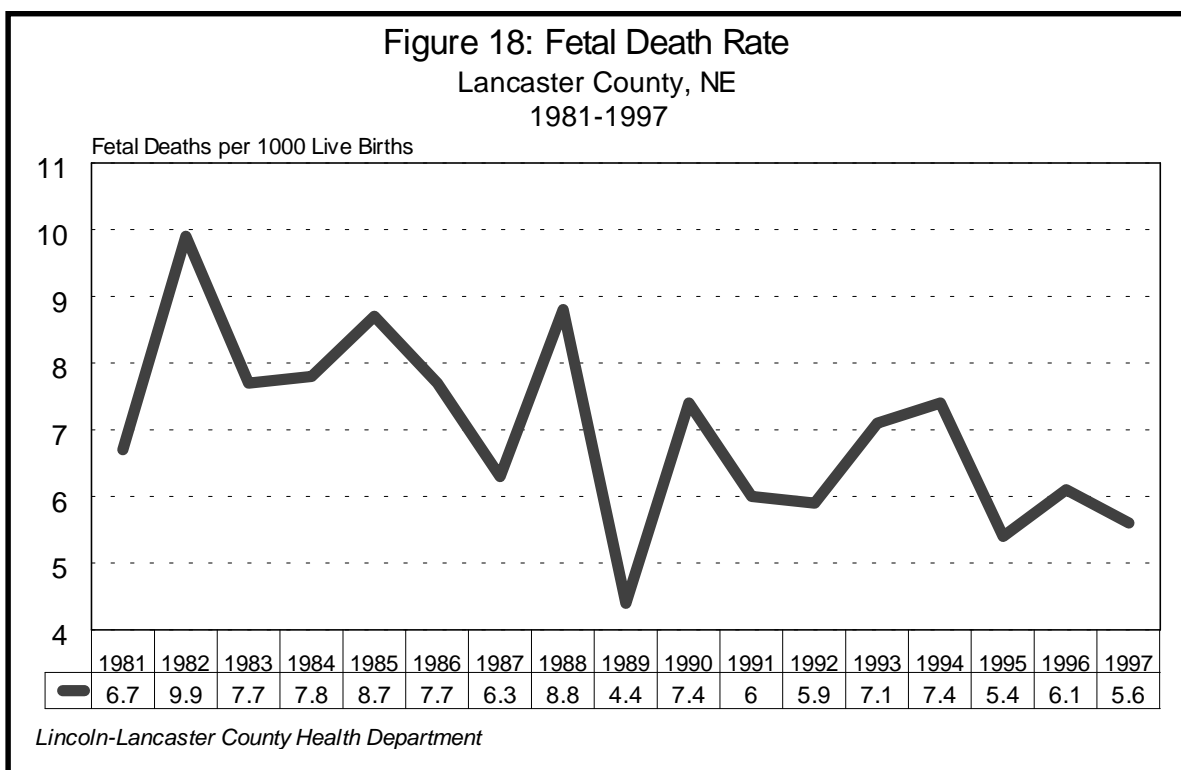
In 1997, 513 (32.8% of total deaths) Lancaster County residents died of heart disease. These 513 deaths translate into a crude death rate due to heart disease of 219.9 per 100,000 estimated population. The average crude death rate for heart disease from 1993 through

**TABLE 22.**  
**Infant Deaths by Race and Sex**  
**Lancaster County, 1997**

<b>Race</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
White	9	4	13
Black	1	1	2
All Other	3	0	3
<b>TOTAL</b>	<b>13</b>	<b>5</b>	<b>18</b>

**TABLE 23.**  
**Infant Deaths by Cause and Sex**  
**Lancaster County, 1997**

<b>Cause of Death</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Respiratory Conditions	5	0	5
Congenital Anomalies	3	1	4
Fetal/Neonatal Hemorrhage	2	1	3
Heart Conditions	1	0	1
Sudden Infant Death Syndrome	1	0	1
Other	1	3	4
<b>TOTAL</b>	<b>13</b>	<b>5</b>	<b>18</b>



1997 was 203.8 per 100,000. The Nebraska Department of Health and Human Services reported an average crude death rate for heart disease of 311.5 per 100,000 population for the State of Nebraska between 1993 and 1997.

The 1997 Nebraska Vital Statistics Report lists Nebraska's age-adjusted death rate for heart disease as 182.2 per 100,000 population for 1997, and 186.1 per 100,000 for 1993 through 1997. Using the same age-adjusted method, Lancaster County's age-adjusted death rates for heart disease were lower: 168.8 per 100,000 for 1997 and 155.5 per 100,000 for 1993-1997.

### **Cancer**

In 1997, 355 (22.7% of total deaths) Lancaster County residents died of cancer. These 355 deaths translate into a crude death rate due to cancer of 152.2 per 100,000 estimated population. This compares to an average crude death rate of 170.6 per 100,000 for 1993 through 1997. The Nebraska Department of Health and Human Services reported an average crude death rate due for cancer of 205.4 per 100,000 estimated population for the State of Nebraska between 1993 and 1997.

The 1997 Nebraska Vital Statistics Report lists Nebraska's age-adjusted death rate for cancer as 147.8 per 100,000 population for 1997, and 152.4 per 100,000 for 1993 through 1997. It cites similar rates for Lancaster County: 139.5 per 100,000 for 1997 and 156.7 per 100,000 for 1993 through 1997.

### **Cerebrovascular Disease**

In 1997, 106 (6.8% of total deaths) Lancaster County residents died of cerebrovascular disease. These 106 deaths represent a crude death rate of 45.4 per 100,000 estimated population in 1997. This compares to an average crude death rate of 50.4 for 1993 through 1997. The Nebraska Department of Health and Human Services reported an average crude death rate due to cerebrovascular disease of 69.6 per 100,000 estimated population for the State of Nebraska between 1993 and 1997.

The 1997 Nebraska Vital Statistics Report states that for the State of Nebraska the age-adjusted death rate for cerebrovascular disease was 37.5 per 100,000 population for 1997, and 38.7 per 100,000 for 1993 through 1997. Rates for Lancaster County were lower: 33.6 per 100,000 for 1997 and 35.8 per 100,000 for 1993 through 1997.

***\*Note: To compare death rates from different populations (Lancaster County and the State of Nebraska), age-adjusted rates should be used.***

## **DEATHS DUE TO UNINTENTIONAL INJURY**

In 1997, 59 deaths (3.8% of total deaths) occurred due to unintentional injury in Lancaster County. The average age of death for male and female residents was 53.5 and 70.4 years, respectively. Males represented 52.5% of all unintentional injury deaths, compared to 47.5% for females (Table 24). Accidental falls (40.7%) were the leading cause of deaths due to unintentional injury in 1997, followed by motor vehicle crashes (32.2%). In addition, three deaths occurred due to accidental poisoning (5.1%), while two deaths occurred due to abnormal reaction or complication causes by surgical and medical procedures (3.4%).

**TABLE 24.**  
**Unintentional Injury Death by Principal Cause**  
**Lancaster County, 1997**

<b>Principal Cause</b>	<b>Frequency</b>
Accidental Falls	24
Motor Vehicle Crashes	19
Accidental Poisoning by Drugs	3
Abnormal reaction or complication causes by surgical and medical procedures	2
Other Injury	11
<b>Total Unintentional Injury Death</b>	<b>59</b>
<b>Average Age:</b>	<b>Male = 53.5</b> <b>Female = 70.4</b>
<b>Sex:</b>	<b>Males = 31 (52.5%)</b> <b>Female = 28 (47.5%)</b>

## DISPOSITION AND PLACE OF DEATH

The most frequent disposition of a body was burial (71.5%), followed by cremation (25.5%) (Table 25). The most frequent place of death was in a nursing home (37.8%), followed by a hospital or medical center-inpatient (29.0%) (Table 26).

**TABLE 25.**  
**Disposition of Body**  
**Lancaster County, 1997**

<b><u>Disposition</u></b>	<b><u>Frequency</u></b>	<b><u>Percent</u></b>
Burial	1118	71.5%
Cremation	399	25.5%
Removal	35	2.2%
Donation	11	0.7%
<b>TOTAL</b>	<b>1563</b>	<b>100.0</b>

**TABLE 26.**  
**Place of Death**  
**Lancaster County, 1997**

<b><u>Place of Death</u></b>	<b><u>Frequency</u></b>	<b><u>Percent</u></b>
Nursing Home	591	37.8%
Hospital or Medical Center - Inpatient	454	29.0%
Residence	347	22.2%
Hospital or Medical Center - Outpatient/ER	110	7.0%
Dead on Arrival at Hospital or Medical Center	2	0.1%
Other Facilities	59	3.8%
<b>TOTAL</b>	<b>1563</b>	<b>100.0</b>

**TABLE 27. SUMMARY OF RESIDENT DEATH STATISTICS FROM 1984 TO 1997, LANCASTER COUNTY, NE**

<b>1984</b>	<b>1985</b>	<b>1986</b>	<b>1987</b>	<b>1988</b>	<b>1989</b>	<b>1990</b>	<b>1991</b>	<b>1992</b>	<b>1993</b>	<b>1994</b>	<b>1995</b>	<b>1996</b>	<b>1997</b>
<b>NUMBER OF DEATHS</b>													
Lancaster County													
1365	1432	1418	1399	1487	1508	1500	1494	1494	1512	1617	1537	1675	1563
Lincoln													
1243	1331	1302	1274	1387	1394	1371	1370	1339	1410	1483	1409	1558	1438
Balance of County													
122	101	116	125	100	114	129	124	155	102	134	128	117	125
<b>RACE</b>													
White													
98.2%	97.4%	97.3%	97.5%	97.9%	97.9%	97.9%	98.2%	97.6%	97.4%	97.8%	97.7%	96.2%	96.2%
Black													
1.4%	1.7%	1.6%	1.2%	1.3%	1.5%	1.7%	1.3%	1.6%	1.8%	1.5%	1.4%	2.4%	2.2%
Other													
0.4%	0.8%	0.8%	1.3%	0.8%	1.0%	0.4%	0.5%	0.8%	0.9%	0.7%	0.9%	1.4%	1.5%
<b>SEX</b>													
Male													
48.8%	50.0%	49.5%	48.9%	50.4%	50.1%	47.8%	45.5%	49.6%	48.3%	47.8%	47.5%	48.4%	46.4%
Female													
51.2%	50.0%	50.5%	51.1%	49.6%	49.9%	52.2%	54.5%	50.4%	51.7%	52.2%	52.5%	51.6%	53.6%
<b>AGE</b>													
Under 1													
2.3%	2.2%	2.1%	2.7%	2.1%	1.7%	1.5%	1.7%	1.6%	2.1%	1.4%	1.3%	1.6%	1.2%
1-14													
0.7%	0.6%	0.8%	1.3%	0.4%	0.5%	1.1%	0.8%	0.9%	0.5%	0.9%	0.3%	0.7%	0.4%
15-29													
2.4%	2.8%	3.1%	2.4%	2.2%	3.2%	2.5%	1.2%	2.8%	2.4%	2.0%	2.1%	2.1%	1.8%
30-44													
2.8%	2.9%	3.7%	2.9%	3.9%	3.1%	4.6%	4.5%	5.2%	4.8%	6.1%	4.6%	4.4%	5.5%
45-59													
9.6%	8.3%	9.3%	8.4%	9.1%	8.4%	8.4%	7.9%	7.9%	9.5%	8.8%	7.3%	9.6%	9.7%
60 & Over													
82.1%	83.0%	81.0%	82.3%	82.3%	83.0%	81.9%	83.9%	81.6%	80.8%	80.8%	84.4%	81.6%	81.4%
<b>AVERAGE AGE AT DEATH</b>													
Male													
67.4	68.3	67.2	67.9	68.0	69.0	67.6	69.0	68.2	67.8	67.9	69.5	68.3	69.2
Female													
76.3	75.2	75.0	75.4	76.0	75.1	76.3	77.2	75.1	76.4	76.1	77.9	77.6	77.1
Total													
71.9	71.7	71.2	71.8	72.0	72.0	72.1	73.5	71.7	72.2	72.1	73.9	73.1	73.4
<b>DEATH RATE</b>													
Deaths per 1000 Population													
6.7	7.1	7.0	6.7	7.0	7.0	7.0	6.9	6.9	6.9	7.3	6.7	7.2	6.7
<b>INFANT DEATHS</b>													
32	32	30	38	31	26	23	25	24	31	22	20	27	18
<b>INFANT MORTALITY RATE</b>													
10.0	10.3	10.0	12.6	10.4	8.2	7.4	7.8	7.8	9.6	7.0	6.3	8.2	5.6
Deaths per 1000 Live Births													
<b>NEONATAL DEATHS</b>													
19	23	22	22	16	16	13	13	10	19	16	17	17	13
<b>NEONATAL DEATH RATE</b>													
5.9	7.4	7.4	6.0	5.4	5.0	7.4	4.1	3.3	5.9	5.1	5.4	5.2	4.0
<b>FETAL DEATHS</b>													
25	27	23	19	26	14	23	19	18	23	23	17	20	18
<b>FETAL DEATH RATE</b>													
7.8	8.7	7.7	6.3	8.8	4.4	7.4	6.0	5.9	7.1	7.4	5.4	6.1	5.6